

Description

The GIRAFFE Agile Multi Beam (AMB) is a battlefield surveillance radar that is tailored for operations with medium- and short-range surface-to-air weapon systems as well as for Weapon and Air Control. The GIRAFFE AMB is also a 360° indirect fire weapons locating radar that provides target location error sufficient to neutralize the shooter. The GIRAFFE system is compact, mobile, reliable, and maintainable.

PM Radars
SFAE-IEW&S-NV-R
Bldg. 1201 East, 3rd Floor
Fort Monmouth, New Jersey 07703



GIRAFFE AGILE MULTI BEAM (AMB) RADAR



Characteristics

The GIRAFFE AMB is housed in a single 20 ft. International Organization for Standardization (ISO) shelter offering high mobility and very short deployment and tear-down times. The dimensions and fittings of the cabin simplifies transport on any container carrying vehicle, offering easy and rapid transport over longer distances. The cabin has integral hydraulics for leveling and raising the antenna mast. A skilled crew can emplace the radar in around 10 minutes and march order it in around three minutes. The cabin contains three compartments, operator, equipment, and power plant compartments. The operator compartment contains two consoles for operators, the equipment compartment contains key electronics, and the power plant compartment provides room for standalone power generation.. For cooling of the electronic equipment and cooling/heating of the operator compartment, a climate control system is built-in.

Special Features

The GIRAFFE AMB provides continuous 360° coverage at high scan rates and with high reliability. The "Stacked Beam" antenna concept employs one wide beam for transmission and multiple digitally shaped narrow beams for reception. This "Stacked Beam" antenna concept enables excellent altitude coverage as well as the high update rate of all targets within the search volume. All targets within the elevation envelope are determined using monopulse techniques thus ensuring high quality 3D target data. The GIRAFFE AMB is capable of simultaneously operating in both air surveillance and weapons locating radar modes.

Capability/Improvements

Weapons locating performance enhancements for improved target acquisition and Command and Control interoperability are continuously being assessed and on an as needed basis incorporated into the baseline system. Software improvements have been added that provide engineers and technicians a means for quick assessment of system performance in a dense electromagnetic environment.

